## Claims

1. A method to detect and geographically locate a rogue user wirelessly accessing a computer network, the method comprising:
   a. deploying at least one Network Management System program;
   b. mapping a geographical area covered by the wireless computer network into at least one island;
   c. measuring at least one network performance parameter for each island to obtain a spatial performance model;
   d. deriving a performance index for each island based on the at least one performance parameter;
   e. identifying a potential rogue user based at least on his Media Access Control (MAC) address and Internet Protocol (IP) address;
   f. measuring at least one performance parameter of the potential rogue user;
   g. deriving at least one performance index for the potential rogue user;
   h. determining location of the potential rogue user by comparing the performance index of the potential rogue user with historical, average performance indices of each island pertinent to the current time of detection; and
   i. effecting at least one network security measure against the rogue user.

2. A method further to Claim 1, the mapping further comprises pre-identifying at least one island.

3. A method further to Claim 1, the deriving at least one network performance index for each island further comprising:
   a. obtaining the differences between the captured values of the performance parameter of rogue user and the performance parameter in the spatial performance model;
   b. determining the minimum value for each difference;

c. normalizing the values for each difference to obtain rank number; and

d. summing the rank numbers for each island to obtain its performance index.

4. A method further to Claim 1, the deriving at least one network performance index for each island further comprising:

a. determining the minimum values of each performance parameter in the spatial performance model;

b. normalizing the values of each performance parameter in the spatial performance model and captured performance parameters of rogue user to obtain the rank numbers;

c. obtaining the differences between the rank numbers of performance parameters in spatial performance model and the captured performance parameters of rogue user; and

d. summing the differences for each island to obtain its performance index.

5. A method further to Claim 1 wherein the deriving of at least one performance index further comprising dynamically re-mapping the islands previously mapped based on the current performance index of each island at time intervals.

6. A method further to Claim 1 wherein the deriving of the performance index of the potential rogue user is substantially similar to the deriving of the performance index for each island.

7. A method further to Claim 1, the determining of the geographical location of the potential rogue user by comparing further comprising matching the performance indices of the at least one island with the performance index of the potential rogue user.

8. A method further to Claim1, the effecting at least one network security measure further comprising:
logging particulars of the rogue user,
displaying geographically location of the rogue user,
denying access to the rogue user, and
prosecuting the rogue user.

9. A system to detect and geographically locate a rogue user wirelessly accessing a computer network, the system comprising:
a computer network with at least one wireless access point,
at least one processor,
at least a network management system,
at least one storage means, and
at least one implementation of the algorithm of the present invention
wherein the rogue user is able to be geographically located without having the computer network's user having to be physically in the vicinity of the rogue user.

10. A system according to Claim 9, the computer network further comprising wireless access points which are connected to the wired computer network.

11. A system further to Claim 9, the at least one network management system further comprising at least one storage means further comprising storage of network performance parameter values, derived network performance characteristics and mapped islands covered by the at least one wireless access point.

12. A system further to Claim 9, the at least one storage means further comprising storage of network performance parameter values, derived network performance characteristics and mapped islands covered by the at least one wireless access point.

13. A system further to Claim 9, wherein the at least one storage means may be part of the at least one network management system.

14. A system further to Claim 9, the at least one implementation of the algorithm of the present invention able to geographically locate the rogue user by matching at least one network performance characteristic of the rogue user with at least one network performance characteristic of at least one pre-mapped island of the network around the at least one wireless access point.